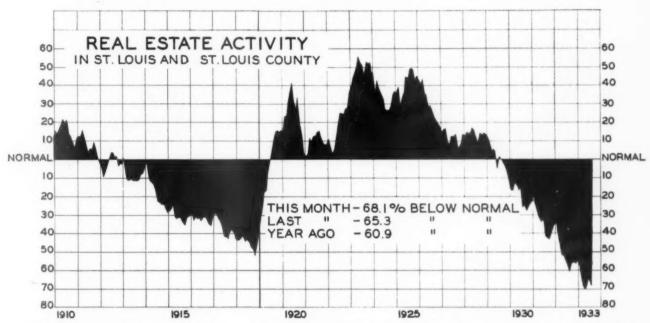


The Real Estate ANALYST

SAINT LOUIS EDITION

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THE most significant indication of recovery this month is the very rapid increase in the marriage rate. After falling rather consistently since 1924, the marriage rate turned up five months ago. During the first three months after the turn, the improvement was slight but during the past two months the rate of increase has been phenomenal - greater than in any two months' period before, not excepting the period right after the armistice. The increase in this rate is the result of greater confidence in the stability of employment.

We are confident that an increase in the marriage rate is accompanied by a proportionate unscrambling of doubled up families, as doubling up of families and delayed marriages are both different expressions of the same fundamental cause. Doubling up and delayed marriages both increase the number of persons per dwelling unit and insofar as this is true, cause a contraction in space requirements.

The increase in the marriage rate is being experienced throughout the entire United States.

In numerous issues of the Real Estate Analyst in the past few months, we have advised the purchase of well selected real estate. Each succeeding month is bringing us a little closer to the inevitable upswing. When this upturn has become pronounced the real estate broker will find it a great deal easier to sell. While the bargains he can offer then will still be great, they will not be quite so good as those he can offer today. The greatest bargains will disappear as the intensity of the depression mitigates.

THE MONTH'S CHANGES AT A GLANCE

ACTIVITY	FORECLOSURES	CONSTRUCTION	APART.RENT	OTHER RENT	MARRIAGES
JUL. AUG. SEP.	JUL. AUG. SER.	JUL. AUG. SEP.	JUL. AUG. SEP.	JUL. AUG. SEP	JUL. AUG. SEP

THE OUTLOOK FOR NEW BUILDING

ENERAL business has shown considerable improvement in comparison with the lows of February and March. Some vacancy has been absorbed. Rentals have stopped their precipitous drop. The marriage rate is increasing. Re-employment is causing some undoubling of doubled-up families.

Will this cause new building to pick up within a reasonable time?

In an effort to answer this question we made a very careful study of the incentives which result in building. This general study with the accompanying data upon which it was based was then subjected to the most detailed mathematical examination by Victor Von Szeliski, Dr. Chas. F. Roos and Max Sasuly, all mathematical statisticians of national reputation. The chart shown on page 199 is the result of their very careful computations. Before we explain this chart, however, let us try to reason out the various steps which bring on a resumption of new building.

The cycles of the building industry are the longest and the most extreme of any with which we are acquainted. From the bottom to the top of a cycle is generally a matter of several hundred percent. The major swings typically last from fifteen to twenty years.

The studies we have made during the past few years have led us to believe that the principal factors affecting new building are: replacement cost new in relation to net rental or value, and ease of financing.

If it seems to the prospective builder that the income which can be received from erecting a building is high in relation to the construction cost, there is a strong incentive to build. If on the other hand, it is apparent that net rentals are so low in relation to current replacement cost that a sufficient return cannot be made on the necessary investment, little building will result. But regardless of how high the expected return may be, little building will result unless long term credit for real estate is available.

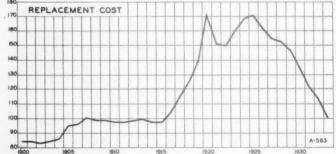
These general principles seem self evident. However, let us see what results we can get from a measured study of these relationships and what implications for the future these results will have.

It is necessary first to get a measure of replacement cost new as it has fluctuated during the period to be studied. Fortunately, the Real Estate Analyst has such an index in the fluctuations in cost of a four-family building, pictured and described on pages 72 and 73 of the October, 1932 issue. The variations in the cost of this building have been compared with the variations in the cost of the four other residential buildings which are reported regularly in the Real Estate Analyst. This comparison has demonstrated clearly that this building is typical (as far as cost fluctuations go) of residential buildings generally during this period.

This particular building was selected for this study as it was probably duplicated, with slight variations, in greater number than any other general type. The specifications were changed several times during the period, due to changes in materials available and differences in building practices. For example during the past year conduit and BX replaced knob and tube wiring formerly allowed. The kitchen drain boards in 1900 were wood, the toilets had high wood tanks, the bathtubs were on legs, the bath floors were not tile and the other floors were not hardwood. Peculiarly, however, the modern fixtures today cost less than the old fashioned ones did twenty to thirty years ago. As most of this type of building was built "open shop", it was felt that labor costs

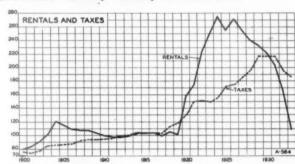
shop", it was felt that labor costs should be computed on what was actually paid, rather than on some "scale" which, in periods of depression at least, has only a theoretical importance.

The chart to the left shows the changes in cost on this building from 1900 to the present. This figure includes the cost of the site.



well the fluctuations in replacement cost, it is next necessary to prepare similar figures for the same period, representing insofar as possible, fluctuations in net rental.

The problem of the annual fluctuations in net rental was approached as follows: gross rentals for the last five or six years were easily obtainable on exact duplicates of this building. For earlier years this gross rental was varied in accordance with the variations shown by the exhaustive studies upon which our rental This amount was then reduced by the percentage of vacancy which indexes are based. prevailed each year. From this annual amount was subtracted the annual tax bill. The remainder is still greater than net rental as no amount has been subtracted for operating expenses. With the figures at hand we were reluctant to estimate operating expenses year by year for the entire period as we believe there would be considerable chance of error in the estimates. We believe it safer to assume that the relative fluctuations of our income index line as figured would not vary greatly from the percentage fluctuations of net rentals. In all of the figures going into this study we are more concerned that the relative fluctuations of the various elements are correct than we are that these items represent to a penny the actual replacement costs, taxes, or rentals.



In the chart to the left we have shown the variations in rentals and taxes from 1900 to the present.

Are the fluctuations shown on these charts typical of the variations of all residential property in the city? The answer to this question is quite evident. Since the rental scale has been prepared from the rental information for the entire city, it is certainly typical.

The fluctuations in occupancy used in this study were the general percentages for the city. The fluctuations in taxes depend on the variations in the tax rate and on the method of assessment. These, therefore, should also be representative of all residential properties.

The ease of financing during this period is the next thing we must measure. We have given serious thought to a number of different ways of accomplishing this. One method used by statistical organizations in the past was to take the interest rate for four to six months' commercial paper. In the period from 1900 to 1929 this worked very nicely; but from that time on interest rates have declined while the possibility of financing real estate has also declined. The index we show in the



declined. The index we show in the chart to the left is the ratio of the total number of families in Saint Louis to the number of foreclosures. When foreclosures are high this line is low and when foreclosures are low this line is high. When foreclosures are high, private capital becomes quite timid as far as real estate is concerned.

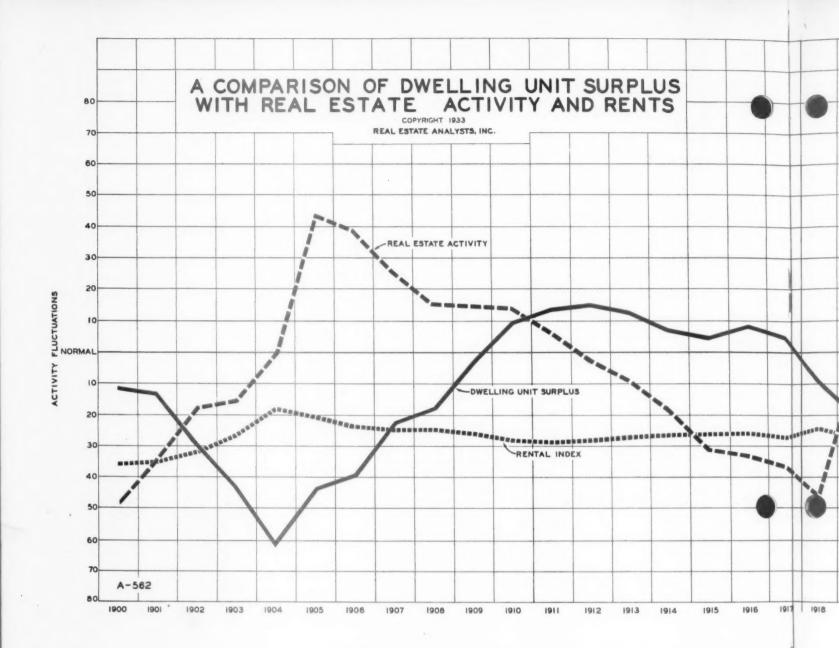
We have indicated on this chart by the dotted line, the volume of residential building each year. It is quite interesting to note that

this line is very similar to the foreclosure line we have used to indicate ease of financing except that this line lags the ease of financing by from one to three years. In other words, new building does not start until sometime after credit conditions have again made financing of real estate possible.

In addition to the deterring effect of heavy foreclosures on the ease of financing, foreclosures limit new building still further by throwing on a disinterested market additional property at a low price level. When property is foreclosed the effect on real estate continues until the property is again in the hands of some one who can actually use it. The length of time that it takes to re-absorb this foreclosed property may account in large measure for the lag which we find between this foreclosure line and new building.

It must be kept in mind, in connection with the foreclosure rate in Saint Louis, that the laws in Missouri make it possible for the holder of the mortgage to take over the property twenty-one days after default, at an expense generally under one hundred dollars. This makes the Saint Louis index far more sensitive to current conditions than would be the case in a state where a long period must elapse before the property in default can be taken over and where the expense of foreclosure is a

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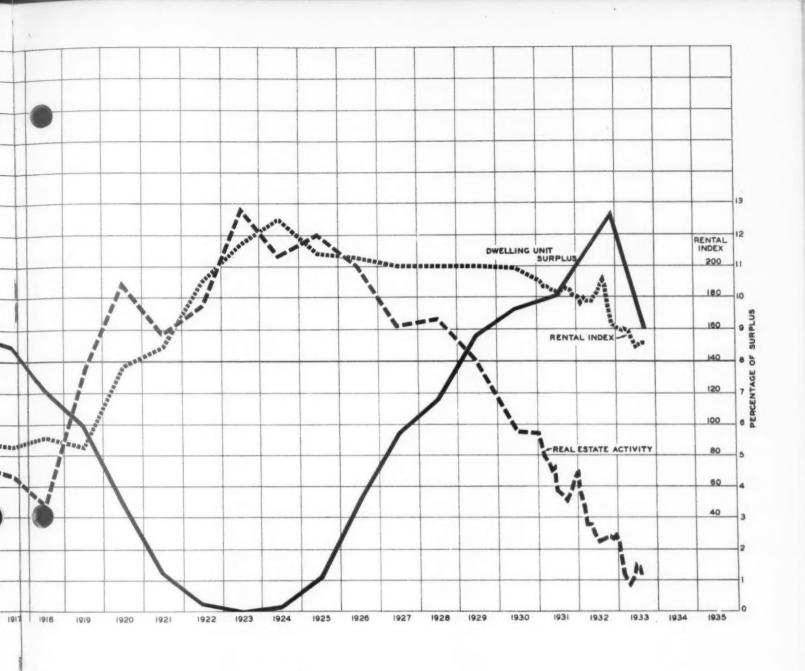


NOW IS THE TIME TO BUY REAL ESTATE

OST important from the standpoint of the broker is the increase in real estate activity. The real estate salesman who is on the firing line has become discouraged during the last four years in his effort to find prospects and to convince them that real estate is a good thing to own. A disillusioned and frightened public has seen rentals and prices decline to alarming lows and weak equities wiped out. Voluntary transfers of real estate have reached a frigid depth of 70% below normal.

What of the immediate future? What assurances are there which the salesman can use in convincing a timid prospect that now is the time to buy real estate? "Ballyhoo" and pressure, merely to make a sale, catch only the gullible and usually react with discredit. Guesses or opinions, which are unsupported by measured data, are unconvincing. However, the confidence which is created and supported by facts fires the salesman with a zeal and enthusiasm which is contagious. To know he is doing a prospect a good turn by selling him well selected properties is more than half the battle won.

The August, 1933 issue of the Real Estate Analyst shows the cycles of real estate activity charted from measured facts coming in definite waves of nearly uniform length. A study of these cycles with their causes makes possible a forecast of their recurrence in the future.



These cycles or waves have occurred regardless of changes in the value of the dollar or in the cost of construction. They are the result of the supply and demand for real estate. Rents and prices rise and fall in unison with these cycles. The change in the value of money only intensifies or lessens the fluctuating rents and prices that are due to supply and demand. Foreclosures also change in unison with these same cycles and are the result of the elimination of equities due to falling prices. Since supply and demand are basically the motivating factors of our ups and downs in real estate, a brief summary of these forces is necessary.

The supply of dwelling units is inelastic, i.e., during periods of low demand, the supply remains fixed and does not decrease to meet lowered demand, as is the case with goods and commodities. Supply is augmented only after periods of increased demand and then construction is usually overdone.

Demand depends upon two entirely different factors - (1) desire, and (2) ability to gratify. When desire has been gratified, any surplus is an indication of over supply; when ability to gratify is lowered, any surplus is an indication of under consumption. It is generally agreed that the present is a period of under consumption due to the inability of many to satisfy normal wants. No one doubts that there are thousands of couples in Saint Louis (estimated at 21,000) who have delayed marriage and have a great desire to marry and establish homes. (See marriage chart). Also, that there are other thousands of married couples who are now living with

other families, but who are anxious to establish homes of their own. These desires have not been gratified because of unemployment and lowered income. Added to this potential demand there are thousands who, through lowered income, have been compelled to move to obsolete quarters but who will again satisfy their desires for better quarters when their circumstances will permit.

The specific function of the NRA is to release potential demand. By spreading employment and raising income, the desires of thousands of families can be gratified. The Real Estate Analyst presents each month the current changes in five important factors affecting real estate. Marriages and new construction are fundamental factors of demand and supply respectively, while rents, activity and foreclosures are primarily the results of the relation between supply and demand. The current changes show marriages increasing 12.7% while new construction remains at its former low level. Residential rents remain stationary and apartment rents show an increase of 2.3%; foreclosures still hover at the high level of the past few months and activity remains sluggish, dropping 2.8 points during September.

Beginning this month, a new feature is added to the Real Estate Analyst. Current occupancy figures for the entire city in different types of properties will be given monthly. Real Estate Analysts, Inc., supervised the two previous occupancy surveys made by the Post Office Department. The detailed data of these surveys were used in selecting seven representative sections of the city. These sections were carefully checked during September and will be re-checked each month hereafter.

The result of the September check is very encouraging. This check would indicate that out of a total vacancy in Saint Louis of 29,513 dwelling units in November, 1932, 6178 have been absorbed, leaving 23,354 vacant units today. It is believed that most of the absorption has occurred since March of this year and represents a rate of absorption between 800 to 1000 per month.

This absorption occurred in the following types of properties:

TYPE	NUMBER ABSORBED	% CHANGE IN OCCUPANCY
Residences	278	+0.4
Single flats	1960	+2.7
Other flats	3020	+4.8
Apartments	920	+4.7
TOTAL	6178	+3.8

This change is shown in the chart above. The nose dive taken by vacancies is easily visualized. Also shown on this chart are the rent and activity lines and their relation to vacancies. The technical relationship of supply and demand and the points of influence on rents, prices and activity will be taken up in a future issue.

This decrease in vacancies can be likened to a fall in the barometer reading. To the informed a marked drop means only one thing, and the mariner never hesitates to prepare for rising winds ahead. The mariner knows in advance of the coming winds; the astronomer knows in advance of the coming eclipse. They have measured facts upon which to base their predictions. To the man who is hesitating to invest in real estate or to the family who desires to own its own home, this fall in the barometer of vacancies is a sure sign that the winds of rising rents and prices are nearby and will soon be blowing. Like the mariner who prepared his ship and trimmed his sails, so the investor and prospective home owner should not hesitate to buy real estate now.

The measured facts of yesterday forecast the happenings of tomorrow.







The chart above shows the drop in the gold value of the dollar since the United States officially suspended the gold standard on April 19.

While there are many factors which affect prices, as a general rule prices go up when the dollar decreases in its gold value, and down when the dollar increases in its gold value.



Building material costs hace advanced 18.0% since the first week in March, as measured on the Irving Fisher index shown on the chart above.

(continued from page 193)

sizeable item.

So much for the various elements which determine new building. The combining of these elements into a single picture is a job which we must leave to the mathematical statistician, as the methods involved are too technical to attempt to explain in this issue. In a general way the process involves the subtraction of taxes from annual rental and a division of this amount by the current replacement cost of the ground and building. This result, multiplied by the percentage of occupancy, furnishes an index of the intensity of the incentive to build. This incentive is then adjusted for the inhibiting effect of foreclosures and modified for the ease of financing.

The two charts on the opposite page give the results of the mathematical combinations of the elements we have discussed.

These charts show the number of family accommodations provided by all building permits for each year in Saint Louis in contrast with the dotted line showing the mathematically derived line from the relationship of rents, taxes, occupancy, foreclosures and ease of financing.

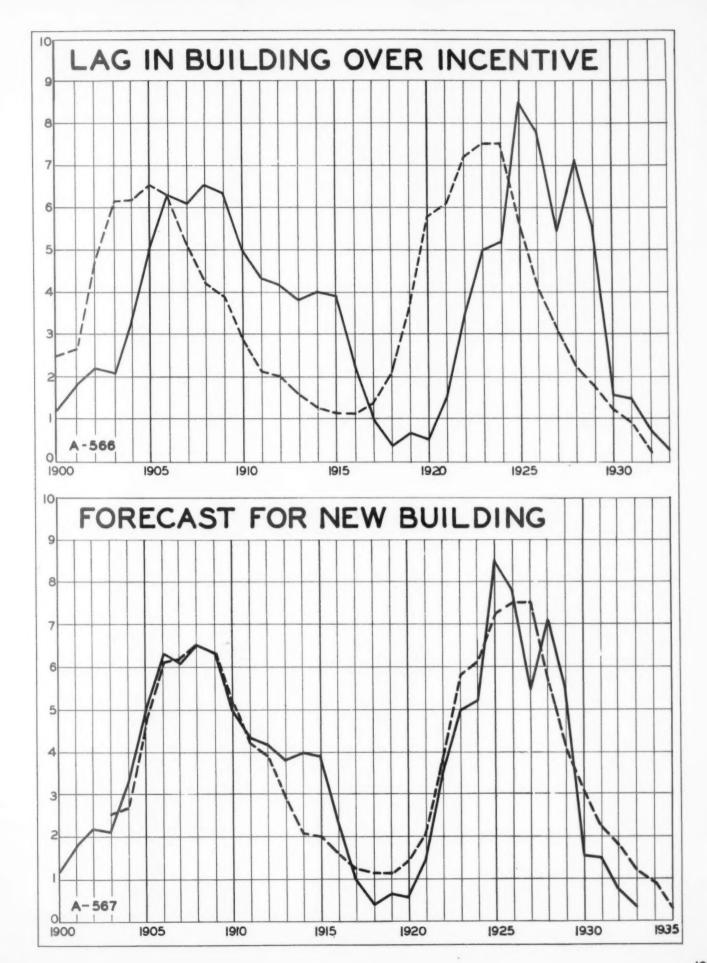
In the top chart the lag is quite apparent between the forecasting line and new building. It seems that during this period, the factors which act as an incentive for new building have advanced three or more years before the volume of new building is increased. While this lag in new building is very pronounced, there seems to be a certain amount of elasticity to it, sometimes lengthening and then again shortening the period.

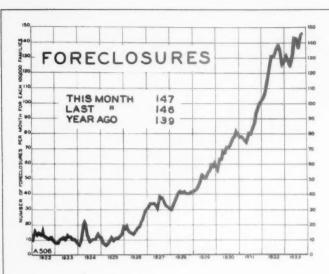
In the bottom chart, the forecasting line has been moved over three years so that its position in any given year represents a forecast of the construction volume for that year. The closeness of fit between this line and the actual construction volume during the thirty years of overlap is really remarkable when it is considered that the position of this forecasting line for any year can be figured three years in advance.

This forecasting line gives us little encouragement for the next few years if a "laissez faire" policy is maintained regarding new construction. It would indicate that no improvement in the volume of new building is likely during 1934 and 1935. Entirely apart from this mathematical study, we believe this forecast is thoroughly in accord with the probabilities for private building, privately financed. However, we are inclined to believe that public funds will be made available during 1934, through the rediscounting of real estate paper on a rather large scale. This will encourage some building of single family residences. However, we do not think the volume of this building will be large, especially if building costs advance faster than rentals, which we are certain they will do.

If no new building is done in the next few years it will have both a good and a bad effect on real estate investments. The absorption of vacancy ordinarily takes place at a far more rapid rate when there is little building than it does when living quarters are being increased at a rapid rate. As vacancies are absorbed, rentals and values rise and a new cycle is begun. On the other hand at the present time it is essential to get building started to absorb the unemployed in the building trades and among the building material industries. If building cannot be stimulated at the present time it may threaten the extent of the recovery. The government in Washington has a keen realization of this fact and every effort is being made to find a way in which the capital goods industries can be helped back on their feet. We are inclined to believe that some stimulation will be possible but we will be quite surprised if any volume of new building can be developed during the next two years.

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Drop since the first of the year. 5.8% Drop in the last twelve months...14.4% Drop from the peak in 1922.....41.9%

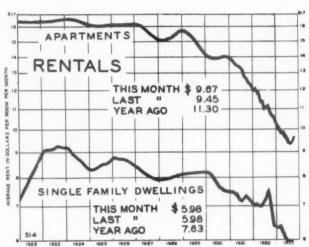
SINGLE FAMILY RESIDENCE RENTALS:

Rise during the month..... Drop since the first of the year. 6.4%
Drop in the last twelve months...21.6%
Drop from the peak in 1924......35.0%



Por the fifth consecutive month, the marriage rate in Saint Louis has been higher than a year ago. The gain it has made in the last three months has been phenomenal, surpassing even the rapid rise following the armistice. During the past five months it has risen to a point 41.6% above the low point of last April. If the marriage rate continues upward it will be followed by an absorption of vacancy and by an increase in real estate activity. Dissolved marriages during the month exceeded new marriages by only 61.

el one point higher during September. It looks very much as if the threat of further inflation is causing many mortgagees to take property over wherever they can. We have heard on good authority that 80% of all of the hotels in the United States are either in receivership or in default on bonds or taxes. Severe as this depression has been, it is interesting to recall that during the great depression of 1873, federal troops were out in eleven states and militia in twenty.



HE number of family accommodations provided for in all new building permits, adjusted for seasonal variation, shows practically no change in comparison with the preceding months. The present price uncertainty under the codes makes most contractors reluctant to bid on work. So far none of the building codes have been signed and only two of the building materials - Lumber and Cast Iron Soil Pipe. The result of the codes on both of these items has been to increase the price beyond the 1926 level.

